

### REMARKS

Favorable reconsideration is respectfully requested.

Upon entry of the above amendment, the claims will be 12-16.

The above amendment rewrites claim 10 in independent form as the new main claim 12.

New claim 13 corresponds to previous claim 2 but depends on new claim 12.

New claims 14 to 16 ultimately depend on claim 12 and are based on previous claims 7, 9 and 6, respectively.

Introduction of new claims 12-16 does not raise new issues or new matter since these claims were essentially already of record.

The significance of the above amendment will now be discussed.

Claims 1-11 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Barton in view of Van Laar.

This rejection is respectfully traversed.

The rejection relies on Van Laar to demonstrate that the molybdate-hydrogen peroxide catalyst system proceeds via a singlet oxygen intermediate in oxidation reactions and that this proves that the reaction according to Barton also proceeds via a singlet oxygen mechanism.

In reply, it was thought by the prior art, until the present application was filed, that molybdate ions catalyze the disproportionation of hydrogen peroxide only in basic aqueous media. See for example Van Laar, who notes on page 267 (first column) and page 268 (second column) that the homogeneous molybdate system requires the presence of a soluble base (alkaline conditions).

Since Barton uses the molybdate catalyst in t-butyl alcohol without using water and a base, the Van Laar reference cannot *prima facie* prove that the Barton reaction proceeds via singlet oxygen.

Furthermore, Barton discloses on page 1612, left column, that reacting the benzamide (V) with ammonium molybdate and hydrogen peroxide yields the quinone (VI) whereas it is stated on page 1614, left column that the singlet oxygenation of the benzamide (V) yields the hydroxy-dienone (IX).

Since Barton explicitly teaches that singlet oxidation of benzamide (V) yields the compound (IX), the reaction on page 1612 can not proceed via singlet oxygen and is not a teaching of such, since it yields a different end product.

Still further, the rejection is made under 35 U.S.C. 103 yet relies on inherency. This is improper in view of *In re Rinehart*, 189 USPQ 143, 148 (CCPA 1976), which points out that inherency and obviousness are completely different concepts. More specifically, as stated in *Rinehart*:

The view that success would have been "inherent" cannot, in this case, substitute for showing of reasonable expectation of success. Inherency and obviousness are entirely different concepts.

In any event, the cited references fail to appreciate the concept of recycling the catalyst, which feature is recited in all of the present claims and is discussed at page 7, lines 5-13 of the present specification.


Accordingly, the rejection on Barton in view of Van Laar is untenable.

No further issues remaining, allowance of this application is respectfully requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact undersigned at the telephone number below.

Respectfully submitted,

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